# Activities by Grade

	K-1	2	3	4	5	6	7-8	9 - 12	Adult
Ad-libbed Aliens (page 23)		•	•	•	•	•	•		
Bane or Blessing? (page 63)						•	•	•	
A Can of Worms (page 67)				•		•	•	•	•
Checking Out the Options (page 113)						•	•	•	
Citizen Scientists (page 89)						•	•	•	•
Diversity Index (page 99)						•	•	•	
Eyewitness Accounts (page 85)	•	•				•	•	•	
Field Notes (page 35)		•		•		•	•	•	•
Garlic Mustard Invasion (page 59)		•		•		•	•	•	•
Global Marketplace (page 9)				•	•	•	•	•	
How to Kill a Dandelion (page 109)		•		•	•	•	•	•	
Inspired by Wrath (page 125)	•	•		•	•	•	•	•	•
Invasive or Not? (page 29)						•	•	•	•
Means & Modes (page 79)				•		•	•	•	•
Outwit-Outplant-Outlast (page 53)						•	•	•	
The Plant Hunters (page 39)	•			•		•	•	•	•
Plants of the Melting Pot (page 75)						•	•	•	
Plotting Plants (page 93)				•	•	•	•	•	
Shears, Sawbuck & Co. (page 117)					•	•	•	•	
Sizing Up Weeds (page 19)							•	•	
Stand Your Ground (page 105)								•	•
Wanted Posters (page 83)					•	•	•	•	
Web of Life (page 45)		•	•		•	•	•		
Weed Out! (page 121)		•	•		•	•	•	•	•
Wildflower, Weed (page 13)					•	•	•	•	•

# Activities by Subject Area

	Language Arts	EE	Math	Science	Social Studies	Fine Arts
Ad-libbed Aliens (page 23)	•			•		•
Bane or Blessing? (page 63)	•		•	•		
A Can of Worms (page 67)		•		•		
Checking Out the Options (page 113)	•			•		
Citizen Scientists (page 89)		•		•		
Diversity Index (page 99)			•	•		
Eyewitness Accounts (page 85)	•			•		•
Field Notes (page 35)	•			•		•
Garlic Mustard Invasion (page 59)		•		•		
Global Marketplace (page 9)		•			•	
How to Kill a Dandelion (page 109)			•	•		
Inspired by Wrath (page 125)				•		•
Invasive or Not? (page 29)				•		
Means & Modes (page 79)		•			•	
Outwit-Outplant-Outlast (page 53)			•	•		
The Plant Hunters (page 39)				•		•
Plants of the Melting Pot (page 75)		•	•		•	
Plotting Plants (page 93)				•	•	
Shears, Sawbuck & Co. (page 117)				•	•	
Sizing Up Weeds (page 19)	•	•	•	•		
Stand Your Ground (page 105)	•	•		•	•	
Wanted Posters (page 83)	•					•
Web of Life (page 45)		•		•		
Weed Out! (page 121)		•		•		
Wildflower, Weed (page 13)			•	•		

# **Activities by Teaching Strategy**

				33			
	Hands-on	Process Skills	Game/ Simulation	Creative Expression	Research	Discussion Analysis	
Ad-libbed Aliens (page 23)				•	•		
Bane or Blessing? (page 63)	•	•			•	•	
A Can of Worms (page 67)	•	•				•	
Checking Out the Options (page 113)					•	•	
Citizen Scientists (page 89)					•	•	
Diversity Index (page 99)	•	•	•		•	•	
Eyewitness Accounts (page 85)	•	•		•			
Field Notes (page 35)	•	•		•			
Garlic Mustard Invasion (page 59)	•	•				•	
Global Marketplace (page 9)					•	•	
How to Kill a Dandelion (page 109)	•				•		
Inspired by Wrath (page 125)	•			•			
Invasive or Not? (page 29)	•	•				•	
Means & Modes (page 79)			•			•	
Outwit-Outplant-Outlast (page 53)			•			•	
The Plant Hunters (page 39)	•	•					
Plants of the Melting Pot (page 75)					•	•	
Plotting Plants (page 93)	•	•			•		
Shears, Sawbuck & Co. (page 117)	•	•			•	•	
Sizing Up Weeds (page 19)		•			•	•	
Stand Your Ground (page 105)		•			•	•	
Wanted Posters (page 83)				•	•		
Web of Life (page 45)			•			•	
Weed Out! (page 121)	•						
Wildflower, Weed (page 13)	•	•					

## Activities by Location/Season

A " • " indicates the activity is not dependent on the seasons and can be done anytime of the year.

	Classroom Activities	Field Experiences	Field Trip to Nature Center <sup>1</sup>
Ad-libbed Aliens (page 23)	•		•
Bane or Blessing? (page 63)	fall		
A Can of Worms (page 67)	spring	spring	spring
Checking Out the Options (page 113)	•		
Citizen Scientists (page 89)	•		
Diversity Index (page 99)	•	growing season	growing season
Eyewitness Accounts (page 85)	•	•	
Field Notes (page 35)	•	•	•
Garlic Mustard Invasion (page 59)		spring	spring
Global Marketplace (page 9)	•		
How to Kill a Dandelion (page 109)	growing season	growing season	
Inspired by Wrath (page 125)	•	•	•
Invasive or Not? (page 29)		growing season	growing season
Means & Modes (page 79)	•		•
Outwit-Outplant-Outlast (page 53)	•		•
The Plant Hunters (page 39)	•	growing season	
Plants of the Melting Pot (page 75)	•		
Plotting Plants (page 93)	•	growing season	growing season
Shears, Sawbuck & Co. (page 117)	•		
Sizing Up Weeds (page 19)	•		
Stand Your Ground (page 105)	•		
Wanted Posters (page 83)	•		
Web of Life (page 45)	•		•
Weed Out! (page 121)	•	•	•
Wildflower, Weed (page 13)	•	growing season	

<sup>&</sup>lt;sup>1</sup> Activities in this column are appropriate for use by field trip providers. The activities can be used in conjunction with a service project or as part of a field trip. See notes on page 8 for more information.

## Wisconsin's Model Academic Standards

## English Language Arts

- A. Reading and Literature
  Bane or Blessing? (A.8.4, A.12.1, A.12.4)
  Stand Your Ground (A.12.1, A.12.3, A.12.4)
- B. Writing
  Ad-Libbed Aliens (B.4.1, B.4.3)
  Eyewitness Account (B.4.1, B.8.1, B.12.1)
  Field Notes (B.4.1, B.8.1, B.12.1)
- C. Oral Language
  Sizing Up Weeds (C.8.1)
  Stand Your Ground (C.12.1)
- D. Language
  Bane or Blessing? (D.12.2)
- E. Media and Technology
  Bane or Blessing (E.8.3, E.12.3)
  Wanted Posters (E.4.3, E.8.3, E.12.3)
- F. Research and Inquiry
  Checking Out the Options (F.8.1, F.12.1)
  Sizing Up Weeds (F.8.1, F.12.1)

### **Environmental Education**

- A. Questioning and Analysis
  Eyewitness Account (A.4.2)
  Garlic Mustard Invasion (A.4.2)
  How to Kill a Dandelion (A.4.1, A.4.2)
- B. Knowledge of Environmental
  Processes and Systems
  Ad-Libbed Aliens (B.4.6)
  Bane or Blessing? (B.8.21)
  A Can of Worms (B.4.4, B.8.8, B.8.21,
  B.12.3, B.12.6)
  Citizen Scientists (B.8.8, B.8.21, B.8.22,
  B.8.23, B.12.5)

Diversity Index (B.8.3, B.8.21, B.12.6, B.12.7)

Garlic Mustard Invasion (B.8.8, B.8.21, B.12.3, B.12.6)

Global Marketplace (B.8.14)

How to Kill a Dandelion (B.4.6)

Means & Modes (B.4.12, B.8.10)

Outwit-Outplant-Outlast (B.8.8, B.8.21, B.12.3, B.12.4, B.12.6)

Plants of the Melting Pot (B.8.10, B.8.18)

- Web of Life (B.4.1, B.8.8, B.8.21) Weed Out (B.8.10)
- C. Environmental Issue Investigation Skills
  Bane or Blessing? (C.8.4)
  A Can of Worms (C.8.2)
  Citizen Scientists (C.8.2)
  Diversity Index (C.8.2)
  Eyewitness Accounts (C.8.2)
  Garlic Mustard Invasion (C.8.2)
  How to Kill a Dandelion (C.8.2)
  Means & Modes (C.12.1)
  Plotting Plants (C.8.2)
  Sizing Up Weeds (C.8.3, C.8.4)
- D. Decision and Action Skills
  Checking Out the Options (D.12.3)
  Citizen Scientists (D.8.5)
  Means & Modes (D.4.3, D.8.5, D.12.4)
  Plotting Plants (D.8.6, D.12.5)
  Sizing Up Weeds (D.8.7, D.12.6)
  Stand Your Ground (D.12.3, D.12.6)
  Weed Out! (D.4.1, D.4.6, D.8.5, D.8.6, D.12.5)

### Math

- A. Mathematical Processes

  Diversity Index (A.8.1)

  Plants of the Melting Pot (A.81)
- B. Number Operations and RelationshipsBane or Blessing? (B.8.7)Diversity Index (B.8.7)Outwit-Outplant-Outlast (B.8.7)
- E. Statistics and Probability
  Diversity Index (E.8.4)
  Sizing Up Weeds (E.8.1, E.12.1)

### Science

A. Science Connections

Bane or Blessing? (A.12.2) A Can of Worms (A.4.5, A.8.6)

Citizen Scientists (A.12.5)

Eyewitness Accounts (A.8.6)

Eigld Natas (A.4.2. A.9.2. A.4.2

Field Notes (A.4.3, A.8.3, A.12.6)

The Plant Hunters (A.4.3, A.4.5, A.8.3)

Plants of the Melting Pot (A.12.2)

Plotting Plants (A.4.3)

Sizing Up Weeds (A.8.1, A.12.2)

B. Nature of Science

Citizen Scientists (B.8.5)

Eyewitness Accounts (B.8.4)

Field Notes (B.8.5, B.12.4)

Global Marketplace (B.4.1)

How to Kill a Dandelion (B.4.1)

The Plant Hunters (B.8.5, B.12.4)

Plotting Plants (B.4.1, B.8.5)

Weed Out! (B.4.1)

C. Science Inquiry

A Can of Worms (C.4.4, C.4.5)

Diversity Index (C.8.2, C.8.3, C.8.4, C.8.6, C.12.5)

Field Notes (C.4.5, C.8.2)

Garlic Mustard Invasion (C.4.5, C.8.2)

How to Kill a Dandelion (C.4.2, C.4.3,

C.4.5, C.4.6, C.8.1, C.8.2, C.8.3,

C.8.4, C.8.5, C.8.6, C.8.7, C.12.1,

C.12.3, C.12.4, C.12.5)

Invasive or Not (C.8.2, C.8.4, C.8.5, C.12.3)

Plotting Plants (C.4.3, C.4.4, C.4.5, C.8.2,

C.8.3, C.8.6, C.8.8, C.12.3)

Wildflower, Weed, or Botanical Bully (C.4.2, C.4.5, C.8.2)

E. Earth and Space Science

Eyewitness Accounts (E.4.5, E.4.6, E.8.8)

F. Life and Environmental Science

Ad-Libbed Aliens (F.4.1, F.4.2, F.4.3, F.8.2)

Bane or Blessing? (F.8.2, F.12.8)

A Can of Worms (F.4.2, F.4.4, F.8.8, F.8.9,

F.12.7, F.12.8, F.12.9)

Checking Out the Options (F.12.8)

Citizen Scientists (F.8.8, F.8.9, F.12.6,

F.12.7, F.12.8)

Diversity Index (F.8.8, F.8.9, F.12.7, F.12.8)

Eyewitness Accounts (F.4.2, F.4.3, F.8.9, F.12.8)

Garlic Mustard Invasion (F.4.1, F.4.2, F.4.4, F.8.8, F.8.9, F.12.7, F.12.8)

How to Kill a Dandelion (F.4.1, F.4.2, F.4.3, F.8.2, F.12.8)

Invasive or Not? (F.8.2, F.12.7, F.12.8)

Outwit-Outplant-Outlast (F.8.2, F.8.8, F.8.9, F.12.7, F.12.8)

Plant Hunters (F.12.5)

Plotting Plants (F.4.3, F.8.2, F.8.8)

Web of Life (F.4.4, F.8.9)

Weed Out! (F.4.2, F.4.3)

Wildflower, Weed, or Botanical Bully (F.12.5)

G. Science Applications

Shears, Sawbuck & Co. (G.8.4, G.12.3, G.12.5)

 H. Science in Social and Personal Perspectives Checking Out the Options (H.12.5, H.12.6) Stand Your Ground (H.12.6) Weed Out! (H.12.5)

### Social Studies

 A. Geography: People, Places, and Environments
 Citizen Scientist (A.8.5)
 Global Marketplace (A.4.7, A.8.7)

> Means & Modes (A.4.4, A.4.8, A.8.7) Plants of the Melting Pot (A.8.7, A.8.11,

A.12.7)

B. History: Time, Continuity, and Change Plants of the Melting Pot (B.8.12)

C. Political Science and Citizenship Stand Your Ground (C.12.8)

D. Economics: Production, Distribution, Exchange, Consumption

Global Marketplace (D.4.3)

Means & Modes (D.8.11)

Shears, Sawbuck & Co. (D.12.10)

## Plant Identification Guides

#### Wildflower Guides

The Audubon Society Field Guide to North American Wildflowers: Eastern Region. W. A. Niering and N. C. Olmstead. 2001.

A Field Guide to Trees and Shrubs. G. A. Petrides. 1973. Peterson Field Guides.

A Field Guide to Wildflowers of Northeastern and North-central North America. Roger Tory Peterson and Margaret McKenny. 1998. Peterson Field Guides.

Flowers. Herbert S. Zim and Alexander C. Martin, 1991. Little Golden Guide.

**Newcomb's Wildflower Guide.** L. Newcomb. 1989. Personal favorite of the author! Includes a key that older students and adults find easy to use.

**Wildflowers and Weeds.** Booth Courtney and James H. Zimmerman. 1978. Photos small, but usually capture the distinguishing features. Out of print, but available in libraries.

#### **Specialized Weed Guides**

Invasive Plants of the Upper Midwest: An Illustrated Guide to Their Identification and Control. Elizabeth Czarapata. 2005.

Weeds, Alexander C. Martin, 2001, Little Golden Guide.

**Weeds of the North Central States.** Lloyd M. Wax. 1981. Complete key based on flower color.

**Weeds of the Northeast.** Richard H. Uva, Joseph C. Neal, Joseph M. Ditomaso. 1997. Identification resource that contains useful tables of similar plant species, foldout identification keys, and notations of unusual identification characteristics.

**Weeds of Northern U.S. and Canada**. F. Royer and R. Dickinson. 1999. In addition to photos of flowering plants, this book includes photos of seeds and weeds in the seedling stage!

#### Guides for Plants that Look Dead!

**A Guide to Wildflowers in Winter.** Carol Levine. 1995. Black and white photos of basal rosettes and drawings of seeds, seed heads, and seed pods.

**Pods: Wildflowers and Weeds in Their Final Beauty**. Jane Embertson. 1980. Color photos of seedpods from garlic mustard to multiflora rose!

**Wildflowers and Winter Weeds**. Lauren Brown. 1997. Line drawings of dried weeds. Includes a key.

#### Internet Guides

**Invasive Species: Plants**. Wisconsin Department of Natural Resources. 2005. Online species information, photo gallery, and control recommendations. <a href="https://www.dnr.wi.gov/invasives/plants.htm">www.dnr.wi.gov/invasives/plants.htm</a>

**WISFLORA:** Wisconsin State Herbarium. University of Wisconsin – Madison. 2005. Online listing of plants by common name, scientific name, habitat, status, and county. Includes *What's Blooming*, an online listing of common roadside plants organized by month and color. Great place to start identifying common flowers in bloom. <www.botany.wisc.edu/wisflora>



#### Wisconsin Environmental Education Board

Produced under a 2004 - 2005 grant from the **Wisconsin Environmental Education Board** (WEEB) in cooperation with the following agencies and organizations. Together we are pleased to bring this resource to educators who care about Wisconsin's forest resources.



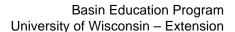
The Park People Friends of Milwaukee County Parks



ENDANGERED RESOURCES

Bureau of Endangered Resources WI Department of Natural Resources









U.S. Department of the Interior Bureau of Land Management



Wisconsin Department of Natural Resources
P. O. Box 7921
Madison, WI 53707

The Wisconsin Department of Natural Resources provides equal opportunity in its employment, programs, services, and functions under an Affirmative Action Plan. If you have any questions, please write to Equal Opportunity Office, Department of Interior, Washington, D.C. 20240. This publication is available in alternative format (large print, Braille, audio tape, etc.) upon request. Please call 608-266-7012 for more information.